CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2013
DateRun:	09/29/2013
Experimenters:	Junhee Cho, Loc Nguyen, Jonathan Oljey, Eyob Befekadu
ClientType:	Cleaning Equipment Mfr
ProjectNumber:	Project #1
Substrates:	Vinyl Composite Tiles
PartType:	Coupon
Contaminants:	Food
Cleaning Methods:	Mechanical Agitation
Analytical Methods:	Gravimetric, Visual, Timing
Purpose:	To evaluate effectiveness of removing baking soda using provided
Experimental Procedure:	A second round of testing was conducted using 120 grams of baking soda. The soil was spread across 40 square feet of floor tile (3 grams per tile). The Qleeno unit was operated on lowest water output, medium water output, and high-water output all with highest water suction. Methods Evaluated: Qleeno; Mop
Results:	After cleaning, baking soda left behind a residual of white streaks. Higher flow helped in reducing the streaking. The wet mop was by far the least effective at cleaning the fine particles from the surface. The high flow with high suction was the fastest and most effective cleaning method evaluated. The medium flow had nearly the same collection efficiency but required a little more time to complete the provided area.

Baking Soda Tests

No obstacle	Type of mop	Initial soil wt (g)	Residual soil on floor(g)	collected soil from floor (g)	soil removal (%)	AVG of soil removal (%)	Time for cleaning(sec)	Observations
30-Sep	Qleeno	121.59	18.26	103.33	84.98	77.82	60	Low flow with High suction
	Qleeno	120.41	24.00	96.41	80.07		74	Low flow with High suction
	Qleeno	120.10	37.93	82.17	68.42		65	Low flow with High suction
No obstacle	Type of mop	Initial soil wt (g)	Residual soil on floor(g)	collected soil from floor (g)	soil removal (%)	AVG of soil removal (%)	Time for cleaning(sec)	
17-Oct	Qleeno	120.03	16.66	103.38	86.12	84.59	61	Medium flow with High Suction
	Qleeno	120.24	16.97	103.27	85.88		64	Medium flow with High Suction
	Qleeno	120.07	21.89	98.18	81.77		63	Medium flow with High Suction
No obstacle	Type of mop	Initial soil wt (g)	Residual soil on floor(g)	collected soil from floor (g)	soil removal (%)	AVG of soil removal (%)	Time for cleaning(sec)	Observations
21-Oct	Qleeno	120.56	16.17	104.39	86.59	84.70	52	High flow with High Suction
	Qleeno	120.59	23.06	97.53	80.87		55	High flow with High Suction
	Qleeno	120.00	16.04	103.96	86.63		44	

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								High flow with High Suction

Summary:

Substrates:	Vinyl Composite Tiles				
Contaminants:	Food				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Water	Water	100	56.98	☐	mop
Water	Water	100	77.82	☐	Qleeno low flow
Water	Water	100	84.59	☑	Qleeno medium flow
Water	Water	100	84.70	☑	Qleeno high flow

Conclusion:

The use of Qleeno with the settings on medium flow and high flow both on high suction was effective in removing soil from the floor with an 85% efficiency and around 1 minute of cleaning for the 40 square feet.